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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,061	06/26/2001	Nicholas R. Bachur JR.	P-5026	1747

26253 7590 08/12/2004

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EXAMINER
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BEISNER, WILLIAM H

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 08/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/892,061

Applicant(s)

BACHUR ET AL.

Examiner

William H. Beisner

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 26 July 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY [check either a) or b)]**

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
  - (b) ☐ they raise the issue of new matter (see Note below);
  - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Attachment to Advisory Action.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☐ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_

Claim(s) objected to: \_\_\_\_\_

Claim(s) rejected: \_\_\_\_\_

Claim(s) withdrawn from consideration: \_\_\_\_\_

8. ☐ The drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_
10. ☐ Other: \_\_\_\_\_

William H. Beisner  
Primary Examiner  
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**ATTACHMENT TO ADVISORY ACTION**

***Response to Arguments***

1. Applicant's arguments filed 26 July 2004 have been fully considered but they are not persuasive.

Applicants argue that all of the 35 USC 103 rejections of record are improper because "None of the cited prior art teaches or suggests the claimed invention".

a) With respect to the reference of Sussman et al., Applicants stress that the IR source is not a diode laser and that carbon dioxide is measured in the 2.3-2.4 micron wavelength region.

b) With respect to the reference of Wrobel et al., Applicants stress that while the reference discloses the use of a tunable IR diode laser, its use would be unuable for the instant invention for the following reasons: 1) The laser diode needs to be cooled in liquid helium; 2) The present invention involves the detection of gases that do not fall within the disclosed wavelength of the reference of Wrobel et al.; and 3) In view of the age of the reference, if practical, the disclosure of Sussman would have mentioned the use of a laser diode.

c) With respect to the reference of Fraatz et al., Applicants stress that the reference of Fraatz et al. does not involve the use of IR spectroscopy but rather involves the use of a color change sensore within the culture bottle.

d) With respect to the reference of Brace, Applicants stress that the pressure measurement of Brace differs from the instant invention because the width of the absorption peak is employed by the instant invention and this is not taught by the reference of Brace. Also the instant invention employs a single wavelenght while the reference of Brace employs a wavelength band.

d) With respect to the reference of Waters, Applicants stress that the reference involves a physical change to detect pressure not changes in absorption spectrum.

f) With respect to the references of Carr et al. and Berndt et al., Applicants stress that these references fail to make up for the previous deficiencies discussed with respect to the other prior art references of record.

In response to a) above, the examiner acknowledges that the reference of Sussman et al. does not disclose the use of a diode laser. For this reason, the reference was combined with the teachings of Wrobel et al.

In response to b) above, the fact that the laser diode needs to be cooled is immaterial for the following reasons: The instant claims do not preclude its use. The fact that Applicants think it may be impractical is immaterial since the device is clearly capable of being used with vessels such as that disclosed in the reference of Sussman et al. (See column 3, lines 9-16, of Wrobel et al.). Furthermore the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). With respect to the wavelengths employed, the device of Wrobel et al. is capable of providing the wavelength required of the reference of Sussman et al. Specifically, the reference of Sussman et al. employs a 2.3-2.4micron wavelength while the device of Wrobel et al. is capable of providing wavelengths between 2-6microns. Furthermore, Applicants arguments with respect to the detection of additional gases are not persuasive because they are not commensurate in scope with

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the instant claim language. None of the instant claims recites the specific wavelengths argued by Applicants. Also, in view of the prior art of Fraatz et al., one of ordinary skill would have been motivated to detect for the presence of additional gases. Determination and/or changes in the system to detect these gases would have been clearly within the purview of one having ordinary skill in the art. For example, if the specific diode laser of Wrobel et al. is not capable of producing a desired wavelength, one of ordinary skill would have been capable of determining other known diode lasers which would be capable of providing the desired wavelength while providing the advantages associated with the use of a diode laser device over other IR sources. In response to applicant's argument based upon the age of the references, contentions that the reference patents are old are not impressive absent a showing that the art tried and failed to solve the same problem notwithstanding its presumed knowledge of the references. See *In re Wright*, 569 F.2d 1124, 193 USPQ 332 (CCPA 1977).

With respect to Applicants' comments directed to the teachings of the reference of Fraatz et al., the reference of Fraatz et al. has been cited as a teaching reference that suggests other gases that are known in the art to be detected within a sealed culture container. The previously discussed disclosures of Sussman et al. and Wrobel et al. clearly suggest that other gases can be measured using IR spectroscopy.

With respect to Applicants' comments directed to the teachings of the references of Waters and Brace, the reference of Waters was cited merely as a tertiary reference that suggests to one of ordinary skill in the art that the presence of pressure changes within a sealed culture vessel is known in the art to indicate the presence of a microorganism. The reference of Brace is relied upon to establish that one of ordinary skill in the art would recognize that IR spectroscopy

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can also be used to indicate pressures changes. Additionally, while applicants comment that the instant invention involves the use of width of the absorption peak for detection of pressure, the instant claims are devoid of any language commensurate in scope with these comments. It is noted that claims 1 and 20 merely recite "a signal analyzer chosen to analyze said detected portion of said energy signal to determine whether said gas exists in said container" and claims 11 and 30 merely recited "analyzing said detected portion of said energy signal to determine whether a pressure exists in said container".

With respect to Applicants' comments directed to the teachings of the reference of Carr et al., the reference of Carr et al. was relied upon as merely as a tertiary reference that suggests that it is conventional in the art to position a light source and detector within a movable housing. The use of a laser to detect the presence of microorganisms within a sealed vessel without a deformable septa has been suggested by the combination of the references of Sussman et al. and Wrobel et al. Note the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

With respect to Applicants' comments directed to the teachings of the reference of Berndt et al., the reference of Berndt et al. was relied upon as merely as a tertiary reference that suggests that it is conventional in the art to position containers on a turntable for interrogation by a light source and detector. The use of a laser to detect the presence of microorganisms within a sealed vessel without a deformable septa has been suggested by the combination of the references of

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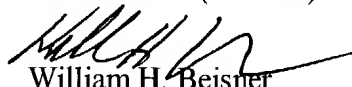
Sussman et al. and Wrobel et al. Note the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

For these reasons Applicants arguments are not found to be persuasive and the 35 USC 103 rejections of record have been maintained.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Beisner whose telephone number is 571-272-1269. The examiner can normally be reached on Tues. to Fri. and alt. Mon. from 6:15am to 3:45pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Warden can be reached on 571-272-1281. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
William H. Beisner  
Primary Examiner  
Art Unit 1744

WHB